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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/371,972

08/10/1999

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03/25/2008

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EXAMINER

GOOD JOHNSON, MOTILEWA

ART UNIT

PAPER NUMBER

2628

MAIL DATE

DELIVERY MODE

03/25/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 09/371,972	Applicant(s) IOURCHA ET AL.	
	Examiner M GOOD JOHNSON	Art Unit 2628	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 February 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 and 23-29 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-18 and 23-29 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1-18 and 23-29 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The Applicant claims randomly selecting an interior point with a graphic primitive, however the term randomly is not disclosed in Applicant's originally filed disclosure.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-18 and 23-29 are rejected under 35 U.S.C. 102 (e) as being anticipated by Wood ET al., U.S. Patent Number 6,204,856.

Regarding claim 1, Woods discloses in a graphics system, a computer-implemented method of rendering a graphic primitive..., method comprising: receiving a

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signal from an interface..., about a plurality of vertices of the primitive and an independent variable (input to receive attribute data of the vertices, col. 5, lines 32- 35); determining a channel value for each of the plurality of vertices of the primitive... (determining a parameter value of a position within a triangle from the attribute value at each vertex, col. 2, lines 6-19); randomly selecting an interior point... (determining parameter values for positions within a triangle, col. 2, lines 12-14); selecting at least two side points... (calculating pixel attribute values by interpolating values at each triangle vertices, col. ,2 lines 1-5); determining an interpolated channel value with an interpolation engine... (interpolation means, col. 2, line 50); and determining a channel value.... (calculating parameter values for position within a triangle from stored attribute values form each triangle, col. 2, lines 14-19)

Regarding claim 2, Woods discloses determining the interpolated channel value for each of the at least two side points further comprises performing linear interpolation... (using incremental interpolation, col. 1, lines 51-61, and interpolation means, col. 2, lines 51-51).

Regarding claim 3, Woods discloses determining the interpolated channel value for each of the at least two side points further comprises performing perspective interpolation... (perspective correction by interpolation, col. 3, lines 53-65).

Regarding claim 4, Woods discloses repeating each of the steps in claim 1 for a plurality of points... (performing tests for each sample point during interpolation, col. 10, lines 49-50).

Regarding claims 5-7, Woods discloses channel value represents color (luminance; texture) (attribute data including color and texture, col. 1, lines 20-22, and further discloses shading calculating done on a per pixel basis, col. 9, lines 63-67, and further discloses not compromising attributes for shading and texturing, col. 11, lines 62-65, thus making it inherent to include luminance parameters for interpolating).

Regarding claim 8, it is rejected based upon similar rational as above independent claim 1. Wood further discloses performing a routine to the input data, col. 5, lines 36-41.

Regarding claim 9, it is rejected based upon similar rational as above independent claim 1.

Regarding claims 10 and 11, Woods discloses determining the channel values of end points of the first (second) edge to determine the channel value... (calculating control values along each edge of a triangle along with the triangle attributes, col. 1, lines 51-61).

Regarding claim 12, Woods discloses using depth values of the first point and second point to determine a channel value... (using depth values for projecting the model, col. 1, lines 25-35).

Regarding claim 13, it is rejected based upon similar rational as above independent claim 1. Wood further discloses performing a routine to the input data, col. 5, lines 36-41.

Regarding claims 14 and 15, they are rejected based upon similar rational as above independent claim 1. Wood further discloses interpolation means, data handling means, calculation means, projections means and pixel shading means, col. 2, lines 46-67.

Regarding claim 23 and 27, they are rejected based upon similar rational as above independent claim 1.

Regarding claims 24 and 25, they are rejected based upon similar rational as above dependent claims 5 and 7.

Regarding claim 26, Woods discloses calculating a screen-based Z coordinate for the point based upon the independent variable X, vertex values..., and depth values..

(using the homogeneity divisor, depth value to give spatial coordinates, col. 1, lines 25-35).

Regarding claims 28 and 29, they are rejected based upon similar rational as above dependent claims 2 and 3 respectively.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to M GOOD JOHNSON whose telephone number is (571)272-7658. The examiner can normally be reached on Monday-Friday 8-4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kee Tung can be reached on (571) 272-7794. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Motilewa Good-Johnson

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Primary Examiner
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/Motilewa Good-Johnson/
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